

# Cultural Science in Kenai Fjords





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# Connecting with the Past — The Kenai Fjords Oral History and Archeology Project

By Aron L. Crowell

(Above) Historic villages of the outer Kenai Coast with Alutiiq place names.



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Yup'ik student Michelle George, of the University of Alaska Fairbanks, excavating the floor of a 700 year-old house at the Cove Site in 2002.

(Left) Artifacts from the Early Contact Village Site, about A.D. 1790 - 1810.

Top, left to right: lead trade ring, wrought iron nail, Russian one-half kopeck coin dated 1748, large bone harpoon head for sea mammals, small bone harpoon head with slate blade (possibly a toy).

Bottom, left to right: two slate arrow blades, three barbed slate lance blades, bone fishhook. The two parts of the hook would have been lashed together with sinew.

Most visitors perceive the Pacific coast of the Kenai Peninsula as a spectacular but empty wilderness, devoid of human history. Glaciers rumble down steep valleys to the sea, and sheer cliffs line the long fjords. The ocean waters teem with otters, whales, seals, and birds; but no echo of a human presence seems to linger in the quiet coastal forests.

History, oral tradition, and archeology tell a different story. Eighteenth century Russian, British, and Spanish explorers encountered Alutiiq (Sugpiaq) people who lived along the Pacific shore of the Kenai Peninsula, and Russian fur companies recruited hunters there for the sea otter trade (*Cook and Norris 1998*). Alutiiq villages and seasonal camps once dotted the coast between Prince William Sound and Cook Inlet, including several within the bounds of Kenai Fjords National Park. The indigenous population dwindled during the nineteenth century and shifted westward, eventually settling at Nanwalek,

Port Graham, and Seldovia. Elders in these Cook Inlet villages still remember stories that their parents and grandparents told about life, travel, and subsistence hunting on the outer coast, from Qugyugtulik (Dogfish Bay) to Prince William Sound (*ADF&G et al. 2000; Stanek 1985, 1999*).

Today the three villages are active partners in the Kenai Fjords Oral History and Archaeology Project, a Smithsonian Institution program of research and education that seeks to bring the past alive for both current Alutiiq generations and visitors to the park. A team of archeologists, students, and village residents is working at sites that are remembered in oral tradition, as well as older locations where ancestral Alutiiq lived hundreds of years ago. The project was organized by the Arctic Studies Center (ASC), a special program for northern cultural and scientific studies that is part of the Department of Anthropology at the Smithsonian's National Museum of Natural History.





Alutiiq kayaks near Port Dick on the outer Kenai coast. Engraved from a watercolor by Henry Humphries, artist with the George Vancouver expedition, 1794.

Anchorage Museum of History and Art photograph

*Crowell and Mann 1996, 1998; McMahan and Holmes 1987*). These include summer hunting camps, winter villages, log cabins, and even groves of old spruce and hemlock trees that bear scars from Alutiiq bark harvesting centuries ago.

Archeological *middens*—trash disposal areas—contain charcoal, fire-shattered rock from cooking fires and steam baths, broken tools, and the discarded remains of shellfish, fish, birds, and mammals. Inside the collapsed remains of earthen-walled houses (called *ciquat* in Alutiiq or by the Russian-Siberian term *barabara*) is more evidence of everyday activities. There are cooking hearths, *uluat* (ulu knives) for preparing food and skins, stone debris from the manufacture of arrow and harpoon points, beads from garments and jewelry, and stone lamps that gave light from burning seal oil.

Scientific archeology is a painstaking effort. Each layer of the soil must be removed slowly, with sharp-eyed attention to the bones and artifacts it contains. The excavated dirt is then water-screened through fine mesh to ensure that small items such as tiny glass trade beads do not escape unnoticed. Excavators map each layer, artifact, and architectural feature on a three-dimensional grid, allowing the site and its contents to be rebuilt later in computer-virtual form. Bones and artifacts are bagged and labeled for identification and analysis. Hundreds of pages of bug and mud-smear notes accumulate in the course of many weeks of work. Archeologists never dig more than a small part of any site, leaving most untouched as a resource for future study.

Cooperating institutions include the Ocean Alaska Science and Learning Center (OASLC), tribal governments, Alaska Native corporations, the Pratt Museum in Homer, and the University of Alaska (Anchorage and Fairbanks campuses). University students and interns from village high schools are assisting scientists in the field and joining in the rediscovery of ancestral life ways. Several dozen Alutiiq Elders have recorded oral histories for the project, and others have helped to interpret archeological discoveries during site visits and community presentations.

### Archeology and History on the Outer Kenai Coast

The outer Kenai coast lies in the very heart of the Alutiiq cultural area, which extends to the Alaska Peninsula, Cook Inlet, the Kodiak archipelago, and Prince William Sound. While work on the Kenai coast is just beginning, archeologists have explored these surrounding areas for decades (*Clark 1984; De Laguna 1934, 1956; Knecht 1995; Steffian 2001*). Studies show that Alutiiq people and their cultural predecessors have lived along the Gulf of Alaska for at least 7,500 years, and possibly for as long as

10,000 years. They developed sophisticated watercraft, fishing methods, and hunting technologies. Classical Alutiiq society was populous, complex, and possessed of unique styles of art, dress, and spiritual celebration (*Crowell et al. 2001*).

Although nearly invisible to the untrained eye, traces of Alutiiq settlements have been discovered all along the outer Kenai coast. More than 30 indigenous archeological sites have been identified in Kenai Fjords National Park and on adjacent Nuka Island, ranging in age from A.D. 250 to the early twentieth century (*Betts et al. 1991*;

Alutiiq Elders from Nanwalek and Port Graham who visited excavations at the Cove Site (A.D. 1000-1300) recognized many features of the houses there because they matched oral tradition. Nick Tanape, Sr. remarked that a slab-lined pit in the center of the floor was like the kind his father and other hunters used for steaming seal and bear meat between layers of seaweed. He suggested that fragments of burned bone found near the hearth were evidence of *pinahsuhtut* “they are hunting for good weather,” a traditional practice of tossing bones in the fire to chase away storms. Examining a complete lance point, *uluq* knife, and other tools left in the house by the dwelling’s last occupants, Elders said that it had always been the custom to leave stores of food, firewood, and tools inside *barabar*as so that weather-besieged travelers on the outer coast could find comfort and shelter there.

At the Early Contact Site in Aialik Bay, excavated in 2003, the archeological team found evidence of contacts between Alutiiq residents and Russian fur traders. During



Natalie Kvasnikoff of Nanwalek, interviewed at an 1880s village site in Aialik Bay, shares traditional knowledge about life on the outer coast.



Nick Tanape, Sr. of Nanwalek (right) discusses archeological finds at the Cove Site (A.D. 1000-1300) with Project Director Aron Crowell. In the 1930s, Mr. Tanape's father traveled to Aialik Bay from Nanwalek by skin-covered kayak for winter trapping and spring seal hunting.

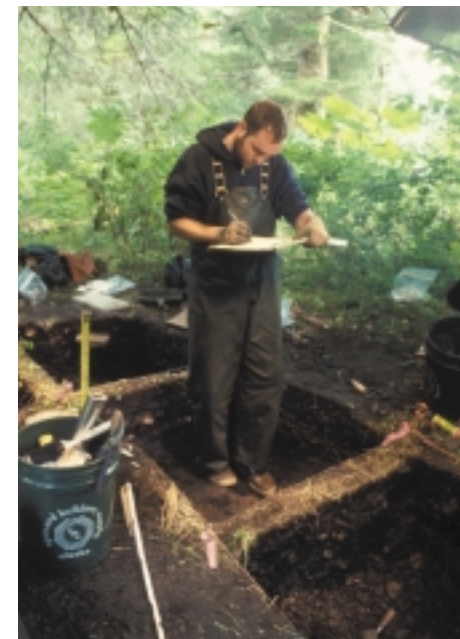
the late 1790s and first decade of the 1800s, the Russian-American Company on Kodiak Island assembled Alutiiq kayak fleets for sea otter hunting. Each April, the largest of these fleets would travel east from Kodiak toward Sitka, passing the Kenai coast and picking up additional hunters along the way (Davydov 1977, Gideon 1989). Some men were recruited to hunt birds (probably puffins or murre) for parkas “on the islands near Voskresensk [Resurrection] Bay” (Davydov 1977), an apparent reference to seabird colonies in the Chiswell Islands or on Renard, Rugged, Hive, and Cheval Islands in Resurrection Bay.

The Early Contact Village in Aialik Bay, which consists of a midden mound and nearby cluster of small house depressions, may be one of the settlements that supplied men for the annual sea otter and bird hunts. The midden and house floors contain hundreds of trade beads in colors and varieties that the Russians brought during this period, as well as a hand-forged iron knife, iron nails, small pieces of window glass (one made into a scraper), a trade ring made of lead, and a 1748 Russian coin. Traditional stone and bone tools, such as slate lance blades and harpoon heads, are present. No imported ceramic cups or plates—common in Alaska Native sites after the 1830s—were found. Based on comparison of these artifacts with those found at other Russian period sites (Crowell 1997; Knecht and Jordan 1985; Bundy *et al.* 2003), we suggest that the Early Contact Village was occupied for several years during the period A.D. 1790-1810. Puffin and murre bones are unusually abundant at the site, suggesting use of the birds for parkas as well as food. Sea otter bones are rare. These animals, common in Aialik Bay today, may have been locally depleted as a result of the Russian commercial harvest by the time the Early Contact Site was occupied.

The site offers clues to the nature of Russian-Native interactions on the Kenai coast. On Kodiak Island, Alutiiq men and women were forced to work for the Russian-American Company and usually received only parkas and other locally made goods in payment. Glass beads, tobacco, and other imported trade items were dispensed very sparingly. The relative abundance of glass beads and other

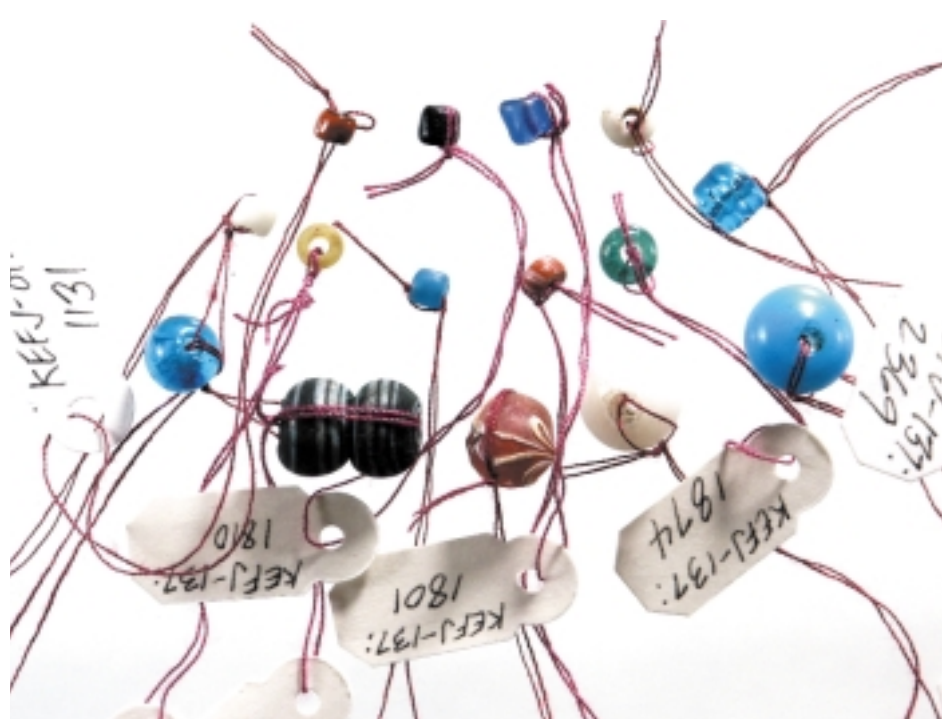


Bird bones from the Early Contact Village Site. Site residents hunted a wide variety of species. All are humerus (upper wing) bones. Left to right: red-throated loon, pelagic cormorant, murre, eider or scoter, puffin, rhinoceros auklet, and common loon. Puffins and murre are the most common bird species in the midden. Identifications by David Yesner, University of Alaska Anchorage.



Jim Whitney, of the University of Alaska Museum in Fairbanks, records artifacts at the Cove Site in 2002.





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Glass trade beads from the Early Contact Village Site. The beads were made in China and Europe and imported by Russian fur traders.

imported artifacts at the Early Contact Site may indicate that Alutiiq villagers on the Kenai coast were not subject to direct and forceful Russian control, and were therefore able to demand more in payment for their furs and labor. An abundance of animal bones at the village site also suggests that it was well supplied with food, as opposed to Kodiak Island villages that were reduced to starvation under the demands of the Russian labor system (Davydov 1977, Gideon 1989).

### People in a Dynamic Environment

Some of the most interesting questions for current research concern Alutiiq

responses to dramatic changes in the landscape, climate, and ecology of the outer Kenai coast. In 1993, geologist Daniel H. Mann (University of Alaska Fairbanks) discovered old tree stumps buried beneath beach gravel on the west side of Aialik Bay, evidence of a massive earthquake that shook southcentral Alaska in about A.D. 1170 (Mann and Crowell 1996). The temblor caused the shoreline of Kenai Fjords National Park to drop about two meters, just as another great Alaska earthquake did in 1964.

The A.D. 1170 earthquake would have been disastrous for human residents. There are few level places to build villages along

the outer Kenai coast, except low-lying spits and beaches. Settlements in such locations would have been flooded by the sudden downward movement of the land, or swept by tidal waves. A thick lens of beach gravel that intrudes between cultural levels at the Cove Site is probably direct evidence of this event. The upper cultural level at this site, which dates to slightly later than the earthquake, shows that people returned after the land had risen again, as it does between major quakes. Nonetheless, the cumulative trend of earth movements on the outer Kenai coast is downward. The narrow, ragged peninsulas of Kenai Fjords National Park consist of mountain ridges that are slowly sinking into the sea. This geological history (see article by J. Freymueller, this issue) explains why sites from the first 8,000 years of Alutiiq history have not been found on the outer coast. Such sites, if not erased by wave action, probably lie deeply buried in beach gravels or underwater off the coast.

Alutiiq residents also had to adapt to



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Yup'ik student Michelle George, of the University of Alaska Fairbanks, holds a long stone lance blade made of slate, from House 8 at the Cove Site.

***Tlingit oral histories from southeast Alaska tell of advancing glaciers that overran living villages. ...One large Alutiiq settlement in Northwestern Lagoon almost suffered this fate, although the ice stopped about 218 yards (200 m) away.***

the chilly temperatures of the Little Ice Age (LIA), a global cooling period between A.D. 1250 and 1900. Glaciers in Aialik Bay, Northwestern Fjord, McCarty Fjord, and other locations grew substantially during the LIA. Tlingit oral histories from southeast Alaska tell of advancing glaciers that overran living villages (*De Laguna* 1972). One large Alutiiq settlement in Northwestern Lagoon almost suffered this fate, although the ice stopped about 218 yards (200 m) away (*Crowell and Mann* 1998).

Colder water temperatures during the Little Ice Age may have had a greater direct impact on Alutiiq residents than advancing glaciers. Recent studies have demonstrated the profound impact of cyclical changes in North Pacific water temperatures, including correlated shifts in the abundance of key subsistence species, such as salmon, seals, and sea lions (*Finney et al.* 2002, *Francis et al.* 1997). Well-preserved bones of sea mammals, fish, and birds at the Early Contact Site may hold important clues to differences between the LIA and present conditions. For example, some species of fish were much larger two centuries ago, including Pacific cod that weighed as much as 50 pounds (*Yarborough* 1998).

Archeological mollusks, such as Nuttall's cockle and the Pacific Littleneck clam, are also substantially larger than modern specimens from Aialik Bay. David Yesner, an archeologist at the University of Alaska Anchorage, is working with the Arctic Studies Center to identify and interpret patterning in the many thousands of bones that were recovered from the Early Contact Site in 2003. We also plan to analyze oxygen, carbon, and nitrogen isotopes in bones and bivalve shells to document trends in water temperature and ocean productivity during the LIA.

### Project Outreach and Education

In addition to its scientific and historical results, the Kenai Fjords Oral History and Archaeology Project has been fertile ground for public outreach and education. Internships sponsored by the Pratt Museum have enabled seven high school students from Homer, Nanwalek, and Port Graham to join scientists in the field for two to six weeks of intensive learning. On-site field schools and lab work have engaged graduate and undergraduate students from the University of Alaska, University of California (Berkeley), and Dartmouth College. The Pratt Museum, Arctic Studies Center, tribal councils, and village residents joined in the production of two educational videos about the project. The Pratt's *Bringing Back the Stories* will become part of its new exhibition *Kachemak Bay: An Exploration of People and Place*, which opens in the summer of 2004. The Arctic Studies Center's *Archaeology and Memory: Ancestral Alutiiq Villages on the Outer Kenai Coast, Alaska* is shown at the

Kenai Fjords National Park visitor center.

The Ocean Alaska Science and Learning Center developed its own 40-minute audiovisual program about the project that is presented daily to summer visitors by interpretive staff at the Alaska SeaLife Center. The program emphasizes how scientific archeology and traditional knowledge can be combined, and features video clips of archeologists in the field and of Alutiiq participants discussing their thoughts about what has been found. The audience is left with a keen awareness of the power of archeology to help define cultural identity and to create strong connections between present and past.

In addition, the OASLC developed a hands-on outreach program aimed at middle and high school students that provides a lesson in archeological stratigraphy and allows students to draw conclusions about a fictional site based on artifacts found there, much as archeologists do. The program highlights the importance of protecting archeological sites so that future generations can learn from them.

In the summer of 2003, National Native News aired a radio feature about the project that was broadcast by more than 50 stations nationwide. The British Broadcasting Company featured the Kenai Fjords work in its *Heritage* radio series in 2002. Several local newspaper articles have also contributed to public awareness of the rich history and cultural resources of Kenai Fjords National Park.

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Early Contact Village archaeology crew, 2003. Excavators are surrounded by walls of midden that are left standing so that layers of the deposit can be drawn. From left to right across front: Forest Kvasnikoff (Port Graham), Katrina Dupree (Seward), Rita Eagle (University of Alaska Anchorage), Connie Hedrick (Seward), Binh Tam Ha (University of California, Berkeley). Left to right across back: Derek Shaw (University of California, Berkeley) and Mark Luttrell (Seward).

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coordinator Mark Luttrell; to Jeff Leer (Alaska Native Language Center) and Ron Stanek (Alaska Department of Fish and Game) for sharing research results; to hard

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